Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application, please amend the claims as follows:

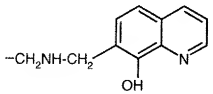
1. (Currently Amended) A method for producing an ion exchanger which comprises carboxyl groups and $-(CH_2)_mNR_1R_2$ groups, comprising the steps of:

a) reacting monomer droplets of a mixture of a monovinyl aromatic compound, a polyvinyl aromatic compound, a (meth)acrylic compound, and an initiator or an initiator combination~~, and also if appropriate a porogen~~, thereby, forming a crosslinked bead polymer, and

b) functionalizing the crosslinked bead polymer using chelating groups and reacting, in this functionalizing step, the copolymerized (meth)acrylic compounds to form (meth)acrylic acid groups, where

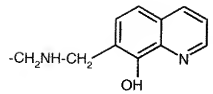
m is an integer from 1 to 4,

R_1 is hydrogen or a radical CH_2-$COOR_3$ or $CH_2P(O)(OR_3)_2$ or -CH_2-S-CH_2COOR_3 or -CH_2-S-C_1-C_4-alkyl or -CH_2-S-$CH_2CH(NH_2)COOR_3$ or



or its derivatives or $C=S(NH_2)$,

R_2 is a radical CH_2COOR_3 or $CH_2P(O)(OR_3)_2$ or -CH_2-S-CH_2COOR_3 or -CH_2-S-C_1C_4-alkyl or -CH_2-S-$CH_2CH(NH_2)COOR_3$ or



or its derivatives or $C=S(NH_2)$ and

R_3 is H or Na or K.

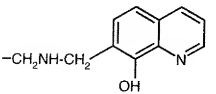
2. (Currently Amended) An ion exchanger which comprises carboxyl groups and $-(CH_2)_mNR_1R_2$ groups ~~obtainable by~~obtained by

a) reacting monomer droplets of a mixture of a monovinyl aromatic compound, a polyvinyl aromatic compound, a (meth)acrylic compound, an initiator or an initiator combination and also if appropriate a porogen to give a crosslinked bead polymer,

b) functionalizing the resultant bead polymer using chelating groups and, in this functionalizing step, reacting the copolymerized (meth)acrylic compounds to form (meth)acrylic acid groups, where

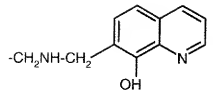
m is an integer from 1 to 4,

R_1 is hydrogen or a radical CH_2-$COOR_3$ or $CH_2P(O)(OR_3)_2$ or $-CH_2$-S-CH_2COOR_3 or $-CH_2$-S-C_1-C_4-alkyl or $-CH_2$-S-$CH_2CH(NH_2)COOR_3$ or



or its derivatives or $C=S(NH_2)$,

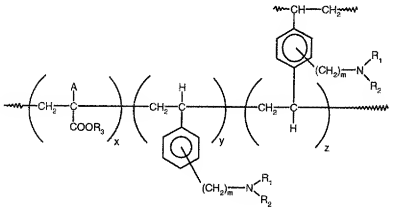
R_2 is a radical CH_2COOR_3 or $CH_2P(O)(OR_3)_2$ or $-CH_2$-S-CH_2COOR_3 or $-CH_2$-S-C_1C_4-alkyl or $-CH_2$-S-$CH_2CH(NH_2)COOR_3$ or



or its derivatives or $C=S(NH_2)$ and

R_3 is H or Na or K.

3. (Previously Presented) The ion exchanger according to claim 2, wherein the composition is according to the general formula (I)



(I)

where

x is equal to 0.01 - 0.3,

y is equal to 0.7 - 0.99,

z is equal to 0.01 - 0.2,

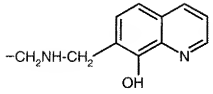
m is an integer between 1 and 4,

A is H or C_1-C_4-alkyl, preferably CH_3,

R_3 is H or Na or K,

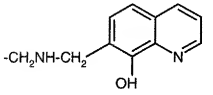
R_1 is hydrogen or a radical CH_2-$COOR_3$ or $CH_2P(O)(OR_3)_2$ or -CH_2-S-CH_2COOR_3 or -CH_2-S-C_1-C_4-alkyl or -CH_2-S-

$CH_2CH(NH_2)COOR_3$ or



or its derivatives or $C=S(NH_2)$ and

R_2 is a radical CH_2COOR_3 or $CH_2P(O)(OR_3)_2$ or $-CH_2-S-CH_2COOR_3$ or $-CH_2-S-C_1C_4$-alkyl or $-CH_2-S-CH_2CH(NH_2)COOR_3$ or



or its derivatives or $C=S(NH_2)$.

4-7. (Cancelled)

8. (Previously Presented) A method for producing an iron exchanger loaded with iron oxide/iron oxyhydroxide comprising carboxyl groups and $-(CH_2)_mNR_1R_2$ groups, wherein the $-(CH_2)_mNR_1R_2$ groups are defined as in claim 2, comprising:

A´) contacting a bead-type chelate-exchange resin having said carboxyl groups and $-(CH_2)_mNR_1R_2$ groups with iron(III) salts in an aqueous suspension,

B´) setting the pH of the suspension obtained from stage A´) in the range from 3 to 10 by adding alkali metal hydroxides or alkaline earth metal hydroxides and isolating the resultant iron oxide/iron oxyhydroxide-comprising chelate-exchange resin.

9. (Currently Amended) An iron oxide/iron oxyhydroxide-loaded ion exchanger which comprises carboxyl groups and $-(CH_2)_mNR_1R_2$ groups which is obtained by

a) reacting monomer droplets of a mixture of a monovinyl aromatic compound, a polyvinyl aromatic compound, a (meth)acrylic compound, and an initiator or an initiator combination~~, and also if appropriate a porogen,~~ to give a crosslinked bead polymer,

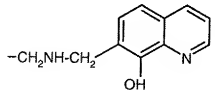
b) functionalizing the resultant bead polymer using chelating groups and, in this functionalizing step, reacting the copolymerized (meth)acrylic compounds to form (meth)acrylic acid groups,

A´) contacting the bead-type ion exchanger which bears carboxyl groups and $-(CH_2)_mNR_1R_2$ groups with iron(III) salts in aqueous suspension,

B´) setting the pH of the suspension obtained from stage A´) in the range from 3 to 10 by adding alkali metal hydroxides or alkaline earth metal hydroxides and isolating the resultant iron oxide/iron oxyhydroxide-loaded chelate-exchange resin, where

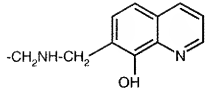
m is an integer from 1 to 4,

R_1 is hydrogen or a radical CH_2-$COOR_3$ or $CH_2P(O)(OR_3)_2$ or -CH_2-S-CH_2COOR_3 or -CH_2-S-C_1-C_4-alkyl or -CH_2-S-$CH_2CH(NH_2)COOR_3$ or



or its derivatives or $C=S(NH_2)$,

R_2 is a radical CH_2COOR_3 or $CH_2P(O)(OR_3)_2$ or -CH_2-S-CH_2COOR_3 or -CH_2-S-C_1C_4-alkyl or -CH_2-S-$CH_2CH(NH_2)COOR_3$ or



or its derivatives or C=S(NH_2) and

R_3 is H or Na or K.

10. (Previously Presented) A process for the adsorption of heavy metals, comprising: contacting the iron oxide/iron oxyhydroxide-loaded chelate-exchange resin according to claim 9 with said heavy metal.

11. (Previously Presented) The process according to claim 10, wherein the heavy metal is arsenic, cobalt, nickel, lead, zinc, cadmium, copper, or a combination thereof.

12. (Previously Presented) A process for the adsorption of a heavy or noble metal and its compounds from a heavy or noble metal-containing aqueous solution or organic solution, comprising: contacting the ion exchanger according to Claim 2 with the heavy or noble metal-containing aqueous solution or organic solution.

13. (Previously Presented) The process according to Claim 12, wherein the heavy or noble metal is mercury, iron, cobalt, nickel, copper, zinc, lead, cadmium, manganese, uranium, vanadium, elements of the platinum group, gold, or silver.

14. (Currently Amended) The process according to Claim 12, wherein the solution is a copper sulfuric acid solution and the heavy or noble metal is one capable of a +III oxidation state and wherein said heavy or noble metal is present in the oxidation state +III.

15. (Currently Amended) The process according to Claim 13, wherein rhodium, at least one of the elements of the platinum group, gold, or silver, or a noble metal-containing catalyst residue is removed from the organic solutions.

16. (Previously Presented) A process for the adsorption of a heavy or noble metal and its compounds from a heavy or noble metal-containing aqueous solution or organic solution, comprising: contacting the ion exchanger according to Claim 3 with the heavy or noble metal-containing aqueous solution or organic solution.

17. (Previously Presented) The process according to Claim 16, wherein the heavy or noble metal is mercury, iron, cobalt, nickel, copper, zinc, lead, cadmium, manganese, uranium, vanadium, elements of the platinum group, gold, or silver.

18. (Previously Presented) The process according to Claim 16, wherein the solution is a copper sulfuric acid solution and the heavy or noble metal is present in the oxidation state +III.

19. (Currently Amended) The process according to Claim 17, wherein rhodium, at least one of the elements of the platinum group, gold, or silver, or a noble metal-containing catalyst residue is removed from the organic solutions.

20. (Previously Presented) A method for producing an iron exchanger loaded with iron oxide/iron oxyhydroxide comprising carboxyl groups and $-(CH_2)_mNR_1R_2$ groups, wherein the $-(CH_2)_mNR_1R_2$ groups are defined as in claim 3, comprising:

A') contacting a bead-type chelate-exchange resin having said carboxyl groups and $-(CH_2)_mNR_1R_2$ groups with iron(III) salts in an aqueous suspension,

B′) setting the pH of the suspension obtained from stage A′) in the range from 3 to 10 by adding alkali metal hydroxides or alkaline earth metal hydroxides and isolating the resultant iron oxide/iron oxyhydroxide-comprising chelate-exchange resin.

21. (NEW) The method according to Claim 1, wherein the reacting step includes a porogen being a part of said reacting.